

Title (en)
FUEL NOZZLE WITH INTERMEDIATE SWIRL CIRCUIT

Publication
EP 0148599 A3 19851204 (EN)

Application
EP 84308583 A 19841210

Priority
US 56266883 A 19831219

Abstract (en)
[origin: EP0148599A2] A fuel nozzle assembly including a nozzle (22) connected to a holder and selectively supplied with primary and secondary liquid fuel through inlet pipes (14, 16) and gas or other fluids through ducts (18,21). A discharge orifice (33) of the nozzle (22) provides a spray from a primary atomizer (52) and a swirl plate (72), either alone or separately. The spray pattern is defined and atomized by air flow from an air swirl annulus (59b) and a passageway (53). An annulus (66) provides a swirling gas flow that is mixed with air flow from the air swirl annulus (59b). Alternatively, the annulus (66) provides a supplemental air flow to atomize the liquid spray.

IPC 1-7
F23D 17/00; **F23D 11/10**; **F23D 14/24**

IPC 8 full level
F02M 61/16 (2006.01); **F02M 61/18** (2006.01); **F23D 11/00** (2006.01); **F23D 14/24** (2006.01); **F23D 17/00** (2006.01)

CPC (source: EP)
F23D 11/007 (2013.01); **F23D 14/24** (2013.01); **F23D 17/002** (2013.01)

Citation (search report)
• [X] US 1536046 A 19250505 - ANTHONY ALFRED R
• [Y] GB 1141536 A 19690129 - ROVER CO LTD
• [A] FR 2103621 A1 19720414 - GEN ELECTRIC
• [A] AT 315342 B 19740527 - ELF UNION
• [A] CH 276515 A 19510715 - ROLLS ROYCE [GB]

Cited by
EP2402581A3; FR2961858A1; GB2198521A; GB2198521B; AU2009200205B2; EP2090830A1; US8365534B2; US8196409B2; US6253555B1; US9500369B2

Designated contracting state (EPC)
DE GB

DOCDB simple family (publication)
EP 0148599 A2 19850717; **EP 0148599 A3 19851204**; JP S60156970 A 19850817

DOCDB simple family (application)
EP 84308583 A 19841210; JP 26821884 A 19841219